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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/276,056	03/25/1999	DARRYL P. BLACK	10360/014001	1593

7590 04/10/2002

DENIS G MALONEY  
FISH & RICHARDSON  
225 FRANKLIN STREET  
BOSTON, MA 021102804

EXAMINER

FLEURANTIN, JEAN B

ART UNIT

PAPER NUMBER

2172

DATE MAILED: 04/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/276,056

Applicant(s)

BLACK ET AL.

Examiner

Jean B Fleurantin

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2172

## **DETAILED ACTION**

### ***Response to Amendment***

1. Claims 1-23 are remained for examination.  
  
Claims 3-23 are added.
2. Applicant's arguments filed on 02/09/2002 on pages 6-8 with respect to claims 1-23 have been fully considered but are not persuasive. Examiner discusses the new added claims 3-23 in the following rejection.

### ***Response to Applicant' Remarks***

3. As per claims 1-2 and 18, Applicant argues that the reference does not teach or fairly suggest:

On pages 6 and 7, Applicant stated that Reeder does not describe or suggest "a system that collects data associated with a network device. Also, a system that produces accounting records from the data. Also, transmitting of records to first and second flow aggregation processes." However, Examiner disagrees because Reeder includes the steps of once the event collector 102 has gathered event object files they are typically communicated to another server, e.g., administration servers 105 marketing analysis server 106 or a billing server the administration servers 105 are used to manage computer traffic within the host data center 14 the marketing analysis server 106 is used by the marketing department 24 to analyze data stored within the event objects that were gathered by the event collector 102; which is readable as awaiting an

Art Unit: 2172

acknowledgment signal from the flow aggregation process that the flow aggregation process received the accounting records before discarding the accounting records sent to the flow aggregation process (see col. 6, lines 58-65). Also, in column 2, lines 40 through 45, Reeder further teaches the system handles issues of high volume scalability and response time by using a number of techniques, billable events that occur within the system are handle in data sets. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Reeder with the step of awaiting an acknowledgment signal from the flow aggregation process that the flow aggregation process received the accounting records before discarding the accounting records sent to the flow aggregation process. This modification would allow the teachings of Reeder to improve the accuracy of the fault tolerance for network accounting architecture.

On page 6, Applicant stated that Reeder does not describe or suggest “plural data collectors”. However, Examiner disagrees because Reeder includes the steps of events that occur on the remote data center 26(a, b) are saved to event object files, these files are then retrieved by the event collector within the host data center 14; which is readable as plural data collector (see col. 5, lines 47-50).

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification.

Interpretation of Claims-Broadest Reasonable Interpretation

Art Unit: 2172

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

***Claim Rejections - 35 U.S.C. § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reeder (U.S. Pat. No. 5,852,812) ("Reeder").

As per claim 1, Reeder substantially teaches a method of transmitting accounting records in an accounting system that produces information pertaining network traffic flow as claimed, comprises collecting data from a network device by a data collector associated with the network device and accounting records from the data (thus, the export format file has been created and saved to a particular subdirectory on the event collector server it is thereafter imported into an import database in a billing server, now that the export format files have been created they are made available to various processes within the distributed network, the billing server can import the export format files one type of billable event data that might be sent to a billing computer;

Art Unit: 2172

which is readable as collecting data by a data collector associated with a network device and to produce normalized accounting records from the data) (see col. 12, lines 13-22);

transmitting the accounting records to first and second flow aggregation processes, with transmitting further comprising for each flow aggregation process (thus, transmitting the selected local currency price to a credit company, which is readable as transmitting further comprising for each flow aggregation process) (see cols. 2 and 3, lines 66-67 and 1-3): storing in the data collector the accounting records (the event object queues are normally stored in memory within the application server or gateway so that the objects can be rapidly saved to a single file, which is readable as storing in the data collector the normalized records) (see figures 6 and 7, col. 11, lines 20-37);

transmitting the accounting records to the flow aggregation process (thus, the remote data center create objects which are stored into respectively event object queues, the event object queues are normally stored in memory within the application server or gateway so that the objects can be rapidly saved to a single file; which is readable as transmitting the accounting records to the flow aggregation process) (see col. 11, lines 14-25). But, Reeder does not explicitly indicate the step of awaiting an acknowledgment signal from the flow aggregation process that the flow aggregation process received the accounting records before discarding the accounting records sent to the flow aggregation process. However, Reeder implicitly indicates the step of once the event collector 102 has gathered event object files they are typically communicated to another server, e.g., administration servers 105 marketing analysis server 106 or a billing server the

Art Unit: 2172

administration servers 105 are used to manage computer traffic within the host data center 14 the marketing analysis server 106 is used by the marketing department 24 to analyze data stored within the event objects that were gathered by the event collector 102; which is readable as awaiting an acknowledgment signal from the flow aggregation process that the flow aggregation process received the accounting records before discarding the accounting records sent to the flow aggregation process (see col. 6, lines 58-65). Also, in column 7, lines 7 through 20, Reeder further teaches the flow of data between the gateway 12 application server 100 event collector 102 database server 104 billing server 108 and marketing analysis server 106 data flows from the gateway 12 to the application server 100 as an interprocess communication pipe between these systems is opened data flows from the gateway 12 to the event collector when event object files are copied from the gateway to the event collector, the events that are generated on the gateway 12 are usually related to a customer's interaction with the host data center 14. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Reeder with the step of awaiting an acknowledgment signal from the flow aggregation process that the flow aggregation process received the accounting records before discarding the accounting records sent to the flow aggregation process. This modification would allow the teachings of Reeder to improve the accuracy of the fault tolerance for network accounting architecture, and provide advantages over prior systems due to the efficiency of handling sets of event objects and set customer billing records and also advantages relating to its ability to bill customers in their base currency (see col. 4, lines 56-60).

Art Unit: 2172

As per claim 2, in addition to the discussion in claim 1 above, Reeder teaches a second flow aggregation process, connected to the data collectors, wherein the data collectors send the collected data to the second flow aggregation (thus, data can flow from application servers located at remote data centers 26 to the event collector as shown in figure 3, once the event object files have been copied to the event collector 102 they are converted to many different export format files, an export format file is a file that contains the data within the object that is to be sent to other systems and services within the host data center 14; which is readable as a second flow aggregation process, connected to the data collectors, wherein the data collectors send the collected data to the second flow aggregation) (see col. 7, lines 21-32).

As per claim 3, Reeder substantially teaches a method further comprise continuing to collect and store accounting records from the network device for future transmission to that flow aggregation process (thus, wherein the data center stores a plurality of data items of commercial value wherein the data center records data representative of the computing devices and transmissions of data items from the data center to the computing devices wherein the data items have associated price information in a plurality of currencies, which is readable as continuing to collect and store accounting records from the network device for future transmission to that flow aggregation process) (see col. 3, lines 8-12).

As per claim 4, in addition to the discussion in claim 3 above, Reeder further teaches the step of determining an error relating to the first flow aggregation process (thus, operating system error trapping can alert a system operator when any process does not complete accurately, which



Art Unit: 2172

is readable as determining an error relating to the first flow aggregation process) (see col. 4, lines 26-28).

As per claims 5, 14, and 20 the limitations of claims 5, 14, and 20 are rejected in the analysis of claim 1 above, and these claims are rejected on that basis.

As per claims 6, 15, and 21 Reeder substantially teaches a method further removing from a local store of the data collector the locally stored copies of the transferred NARs (thus, if the import does complete without errors at decision state 704 then each row in the database is stamped with a unique ID number at a state 708 and stored as a logged transaction into the billing database at state 710, which is readable as removing from a local store of the data collector the locally stored copies of the transferred NARs (see col. 15, lines 2-5).

As per claims 7, 16, and 22 Reeder substantially teaches a method as claimed wherein store and forward capabilities of the flow data collector provide fault tolerance at this accounting process level to ensure reliable data transfer (thus, an event object that is created when a customer closes a connection to the distributed network 'i.e., signs off' can be generated at a gateway computer and then copied to a billing computer for tracking the customer's on-line usage) (see col. 4, lines 18-21).

As per claims 8, 17, and 23, in addition to the discussion in claim 6 above, Reeder teaches wherein flow data collector only transfers NARs when the data collector has determined that the flow aggregation process is available (thus, the system are handled in data sets, which is readable

Art Unit: 2172

as wherein flow data collector only transfers NARs when the data collector has determined that the flow aggregation process is available) (see col. 40-45).

As per claims 9, 11, and 13, in addition to the discussion in claims 3 and 4 above, Reeder further teaches the step to cause the aggregate reports from the second flow aggregation process to be sent to the accounting module in place of the aggregate reports from the first flow aggregation process (thus, event objects can also be created and then advantageously copied to many different sites on the network, an event object that is created when a customer closes a connection to the distributed network 'i.e., signs off' can be generated at a gateway computer and then copied to a billing computer for tracking the customer's on-line usage because the event generation system is designed to preferably run under the Microsoft Windows NT RTM operating system error trapping can alert a system operator when any process does not complete accurately as is known the Windows NT operating system will generate Alert objects that will notify a system operator of any errors that have occurred within the system; which is readable as cause the aggregate reports from the second flow aggregation process to be sent to the accounting module in place of the aggregate reports from the first flow aggregation process) (see col. 4, lines 16-28).

As per claim 12, Reeder substantially teaches a method as claimed further comprises logic to determine that flow aggregation process is not operating to cause the data collector to collect and store accounting records from the network device for future transmission (thus, and transmissions of data items of commercial value from the data center to computing devices of identified network customers, which is readable as to determine that flow aggregation process is

Art Unit: 2172

not operating to cause the data collector to collect and store accounting records from the network device for future transmission) (see col. 24, lines 32-34).

As per claim 18, in addition to the discussion in claim 1 above, Reeder teaches determine an error relating to the first flow aggregation process to cause the aggregate reports from the second flow aggregation process to be sent to the accounting module in place of the aggregate reports from the first flow aggregation process (thus, event objects can also be created and then advantageously copied to many different sites on the network, an event object that is created when a customer closes a connection to the distributed network 'i.e., signs off' can be generated at a gateway computer and then copied to a billing computer for tracking the customer's on-line usage because the event generation system is designed to preferably run under the Microsoft Windows NT RTM operating system error trapping can alert a system operator when any process does not complete accurately as is known the Windows NT operating system will generate Alert objects that will notify a system operator of any errors that have occurred within the system; which is readable as determine an error relating to the first flow aggregation process to cause the aggregate reports from the second flow aggregation process to be sent to the accounting module in place of the aggregate reports from the first flow aggregation process) (see col. 4, lines 16-28).

As per claim 10 the limitations of claim 10 are rejected in the analysis of claims 1 and 18 above, and this claims is rejected on that basis.

Art Unit: 2172

As per claim 19, in addition to the discussion in claim 3 above, Reeder further teaches the step of determine that one of the flow aggregation processes is not operating (thus, operating system error trapping can alert a system operator when any process does not complete accurately, which is readable as flow aggregation processes is not operating) (see col. 4, lines 26-28).

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bruins et al. US Patent No. 6,308,148 relates to flows in a flow switching network.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

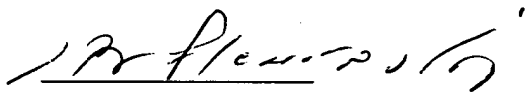
Art Unit: 2172

***Conclusion***

7. Any inquiry concerning this communication from examiner should be directed to Jean Bolte Fleurantin at (703) 308-6718. The examiner can normally be reached on Monday through Friday from 7:30 A.M. to 6:00 P.M.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Mrs. KIM VU can be reached at (703) 305-8449. The FAX phone numbers for the Group 2100 Customer Service Center are: *After Final* (703) 746-7238, *Official* (703) 746-7239, and *Non-Official* (703) 746-7240. NOTE: Documents transmitted by facsimile will be entered as official documents on the file wrapper unless clearly marked "***DRAFT***".

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2100 Customer Service Center receptionist whose telephone numbers are (703) 306-5631, (703) 306-5632, (703) 306-5633.



Jean Bolte Fleurantin

April 7, 2002

JBf/



HOSAIN T. ALAM  
PRIMARY EXAMINER